Section 1 - Chemical Product and Company Identification

**MSDS Name:** Vanillin

**Catalog Numbers:**
- 14082-0000, 14082-0010, 14082-0020, 14082-1000, 14082-2500,
- 14082-5000, 38586-0000

**Synonyms:** 4-Hydroxy-3-methoxybenzaldehyde

**Company Identification:**
- Acros Organics BVBA
  - Janssen Pharmaceuticaal 3a
  - 2440 Geel, Belgium
- Acros Organics
  - One Reagent Lane
  - Fair Lawn, NJ 07410

**For information in the US, call:** 800-ACROS-01

**For information in Europe, call:** +32 14 57 52 11

**Emergency Number, Europe:** +32 14 57 52 99

**Emergency Number US:** 201-796-7100

**CHEMTREC Phone Number, US:** 800-424-9300

**CHEMTREC Phone Number, Europe:** 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>%</th>
<th>EINECS#</th>
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<tbody>
<tr>
<td>121-33-5</td>
<td>Vanillin</td>
<td>99%</td>
<td>204-465-2</td>
</tr>
</tbody>
</table>

**Hazard Symbols:** None listed

**Risk Phrases:** None listed

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

_Not available_

**Potential Health Effects**

**Eye:** Causes mild eye irritation.

**Skin:** Non-irritating to the skin. Low hazard for usual industrial handling.

**Ingestion:** May cause irritation of the digestive tract. May be harmful if swallowed.

**Inhalation:** May cause respiratory tract irritation. May be harmful if inhaled.

**Chronic:**

Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**Ingestion:** Get medical aid. Wash mouth out with water.
**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:**

### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dangerous fire hazard in the form of dust when exposed to heat or flame.

**Extinguishing Media:** In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam.

### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container.

### Section 7 - Handling and Storage

**Handling:** Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

### Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

CAS# 121-33-5:

**Personal Protective Equipment**

**Eyes:** Wear chemical splash goggles.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline powder

**Color:** white - light yellow

**Odor:** vanilla-like

**pH:** 4.3 (10 g/L (20°C))

**Vapor Pressure:** 0.0029hPa @25 deg C

**Viscosity:** Not available

**Boiling Point:** 170 deg C @15mmHg (338.00°F)

**Freezing/Melting Point:** 81 - 84 deg C

**Autoignition Temperature:** > 400 deg C (> 752.00 deg F)

**Flash Point:** 147 deg C (296.60 deg F)

**Explosion Limits: Lower:** Not available

**Explosion Limits: Upper:** Not available

**Decomposition Temperature:**

- **Solubility in water:** 10 g/l (25°C)
- **Specific Gravity/Density:** 1.060
- **Molecular Formula:** C8H8O3
- **Molecular Weight:** 152.15

Section 10 - Stability and Reactivity

**Chemical Stability:** Air sensitive. Moisture sensitive. Light sensitive.

**Conditions to Avoid:** Incompatible materials, light, exposure to air, excess heat, exposure to moist air or water, temperatures above 160°C.

**Incompatibilities with Other Materials**
- Strong oxidizing agents, reducing agents, strong bases, alkalis, aluminum at high temperatures.

**Hazardous Decomposition Products**
- Carbon monoxide, carbon dioxide.

**Hazardous Polymerization**
- Will not occur.

Section 11 - Toxicological Information

**RTECS#:** CAS# 121-33-5: YW5775000

**LD50/LC50:**

- **RTECS:**
  - **CAS# 121-33-5:** Oral, mouse: LD50 = 3925 mg/kg;
  - Oral, mouse: LD50 = 1480 mg/kg;
  - Oral, rat: LD50 = 1580 mg/kg;
  - Skin, rabbit: LD50 = >5010 mg/kg;
  - Other: Oral rat LD50 = 3978 mg/kg Oral rat LD50 = 4200 mg/kg Oral rat LD50 = 4730 mg/kg Skin rat LD50 > 2000 mg/kg Inh rat LC0 > 0.0417 mg/L/4H Inh mouse LC0 > 0.0417 mg/L/2H Skin rabbit: not irritating Skin human: not irritating Eye rabbit: slightly irritating Draize test guinea pig: not sensitizing

**Carcinogenicity:** Vanillin - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

**Other:** The toxicological properties have not been fully investigated. See
Section 12 - Ecological Information

Ecotoxicity:  
Daphnia: Daphnia: 180 mg/L; 24H; EC50  
Fish: Pimephals prome: 57-123 mg/L; 72H; LC50  
Fish: Pimephals prome: 88-121 mg/L; 96H; LC50  
Bacteria: Phytobacterium phosphoreum: 0.38 mmol/L; 5M; EC50

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
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<th>IMO</th>
<th>RID/ADR</th>
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</thead>
<tbody>
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<tr>
<td>UN Number:</td>
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<td></td>
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<tr>
<td>Packing Group:</td>
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</tbody>
</table>

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available
Risk Phrases:

Safety Phrases:

S 22 Do not breathe dust.
S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 121-33-5: Not available

Canada

CAS# 121-33-5 is listed on Canada's DSL List

US Federal

TSCA

CAS# 121-33-5 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 7/16/1996
Revision #1 Date: 12/15/2004
Revisions were made in Sections: General revision.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of
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